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PATENT
Customer No. 22,852
Attorney Docket No. 09741.0004-00000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Joseph Tucker et al.) Group Art Unit: 1634
)
Application No.: 10/762,796) Examiner: Not Yet Assigned
)
Filed: January 22, 2004)
)
For: NITRIC OXIDE DONATING) Confirmation No.: 5397
)
DERIVATIVES OF STILBENES,)
PHOLYPHENOLS AND
FLAVONOIDS FOR THE
TREATMENT OF
CARDIOVASCULAR DISORDERS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R.
§ 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents on the attached listing. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed foreign and non-patent literature documents are attached.
Copies of the U.S. patent publications are not enclosed.

Where copies of listed documents are not enclosed, these references are of record in prior Application No. 10/222,013, filing date August 15, 2002, upon which Applicants rely for the benefits provided in 35 U.S.C. § 120.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

With respect to the non-English language documents, Applicants submit the following remarks:

1. **CN 1386742** - A English language abstract of this document can be found on the Chemical Abstracts sheet submitted herewith.
2. **FR 2735366** - A English language abstract of this document can be found on the Chemical Abstracts sheet submitted herewith.
3. **FR 2737662** - A English language abstract of this document can be found on the Chemical Abstracts sheet submitted herewith.
4. **Luo et al., Acta Pharmacologica Sinica 11:147-150 (1990)** - An English language abstract can be found on p. 147 of this document.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.


ATTORNEY DOCKET NO. 09741.0004-00000
APPLICATION NO. 10/762,796

If there is any fee due in connection with the filing of this Statement, please
charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: April 7, 2006

By: 
Gretchen S. Peterson
Reg. No. 57,404

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

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of

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Application Number

10/762,796

Filing Date

January 22, 2004

First Named Inventor

Joseph Tucker

Art Unit

1634

Examiner Name

Not Yet Assigned

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U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS

Examiner Initials	Cite No. ¹	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-5,219,888	06/15/1993	Katocs, Jr. et al.	
		US-5,580,722	12/03/1996	Foulkes et al.	
		US-5,641,755	06/24/1997	Weichselbaum et al.	
		US-5,721,096	02/24/1998	Karathanasis et al.	
		US-5,747,536	05/05/1998	Cavazza	
		US-2003/0166281	09/04/2003	Foulkes et al.	
		US-2004/0235888	11/25/2004	Yamamori et al.	
		US-2004/0242615	12/02/2004	Yamamori et al.	

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		CA 2070058	12/01/1992	Gadski et al.		
		CN 1386742	12/25/2002	Bangqiang et al.		
		EP 0 167 115 A2	01/08/1986	Puricelli		
		EP 0 256 999 A2	02/24/1988	Calvani et al.		
		EP 0 773 020	05/14/1997	Cavazza		
		EP 1 336 602 A2	08/20/2003	Scaramuzzino		
		FR 2735366	06/15/1995	Uclaf Roussel		
		FR 2737662	08/08/1995	Berzaghi et al.		
		GB 2043443	10/08/1980	Cavazza		
		WO 94/12463	06/09/1994	Arena		
		WO 95/30641	11/16/1995	Del Soldato et al.		
		WO 00/72838	12/07/2000	Eek et al.		
		WO 01/12584	02/22/2001	Del Soldato		
		WO 01/16120	03/08/2001	Brooks et al.		
		WO 01/66088	09/13/2001	Holmberg et al.		
		WO 01/98286	12/27/2001	Garvey et al.		
		WO 02/18355	03/07/2002	Brooks et al.		
		WO 02/074282	09/26/2002	Siekman et al.		
		WO 03/022249	03/20/2003	Holmberg		
		WO 03/080029	10/02/2003	Morein et al.		
		WO 03/084550	10/16/2003	Del Soldato		

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				Examiner Name	Not Yet Assigned
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FOREIGN PATENT DOCUMENTS					
		WO 2004/000273	12/31/2003	Del Soldato et al.	
		WO 2004/000300	12/31/2003	Del Soldato et al.	

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		Translation ⁶
		Adam et al., "Carbon-Carbon Bond Cleavage of the [2.2]Paracyclophane Radical Cation Generated by Electron Transfer Oxidation with Cerium(IV) Ammonium Nitrate," <i>Chem. Ber.</i> 127:875-879 (1994)		
		Aggarwal et al., "Role of Resveratrol in Prevention and Therapy of Cancer: Preclinical and Clinical Studies," <i>Anticancer Res.</i> 24:2783-2840 (2004)		
		Ahn et al., "Epigallocatechin-3 Gallate Selectively Inhibits the PDGF-BB-induced Intracellular Signaling Transduction Pathway in Vascular Smooth Muscle Cells and Inhibits Transformation of sis-transfected NIH 3T3 Fibroblasts and Human Glioblastoma Cells (A172)," <i>Mol. Biol. Cell</i> 10:1093-1104 (1999)		
		Bai et al., "Genistein-induced Changes in Gene Expression in Panc 1 Cells at Physiological Concentrations of Genistein," <i>Pancreas</i> 29:93-98 (2004)		
		Borradaile et al., "Soya Phytoestrogens, Genistein and Daidzein, Decrease Apolipoprotein B Secretion from HepG2 Cells Through Multiple Mechanisms," <i>Biochem. J.</i> 366:531-539 (2002)		
		Boschi et al., "New Potential Uroselective NO-Donor α 1-Antagonists," <i>J. Med. Chem.</i> 46:3762-3765 (2003)		
		Brunet et al., "Binding of Catechin and Grape Seed Procyanidins to Human and Rat Plasma Proteins," <i>Bull. O.I.V.</i> 74(843-844):364-376 (2001)		
		Burgaud et al., "Nitric-Oxide Releasing Molecules: A New Class of Drugs with Several Major Indications," <i>Curr. Pharma. Des.</i> 8:201-213 (2002)		
		Cirino et al., "Inhibition of Inducible Nitric Oxide Synthase Expression By Novel Nonsteroidal Anti-Inflammatory Derivatives With Gastrointestinal-Sparing Properties," <i>Br. J. Pharmacol.</i> 117:1421-1426 (1996)		
		Clarkson et al., "Inhibition of Postmenopausal Atherosclerosis Progression: a Comparison of the Effects of Conjugated Equine Estrogens and Soy Phytoestrogens," <i>J. Clin. Endocrinol. Metab.</i> 86:41-47 (2001)		
		Dahshti et al., "Concurrent Inductions of Avian Hepatic Lipogenesis, Plasma Lipids, and Plasma Apolipoprotein B By Estrogen," <i>J. Lipid Res.</i> 24:368-380 (1983)		
		Giller et al., "Regulation of Human Apolipoprotein A-1 Expression in Caco-2 and HepG2 Cells by All-trans and 9-cis Retinoic Acids," <i>J. Lipid Res.</i> 36:1021-1028 (1995)		
		Goldberg et al., "Beyond Alcohol: Beverage Consumption and Cardiovascular Mortality," <i>Clin. Chim Acta</i> 237:155-187 (1995)		
		Grech et al., "Novel CA^{2+} -ATPase Inhibitors from the Dried Root Tubers of <i>Polygonum Multiflorum</i> ," <i>J. Nat. Prod.</i> 37:1682-1687 (1994)		
		Grimes et al., "Cholinergic Stimulation of Early Growth Response-1 DNA Binding Activity Requires Protein Kinase C and Mitogen-Activated Protein Kinase Kinase Activation and Is Inhibited By Sodium Valproate in SH-SY5Y Cells," <i>J Neurochem.</i> 73:1384-1392 (1999)		
		Halling, "Altered Patterns of Proteins Released <i>In Vitro</i> From Oviductal and Uterine Tissue From Adult Female Mice Treated Neonatally With Diethylstilbestrol," <i>J. Steroid</i>		

IDS Form PTO/SB/08: Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/762,796
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NON PATENT LITERATURE DOCUMENTS		
	Biochem. Mol. Biol. 44:227-237 (1993)	
	Inamori et al., "The Biological Activity of 3,4-O-Isopropylidene-3,3',4,5'-tetrahydroxystilbene," <i>Chem. Pharm. Bull.</i> 33:2904-2909 (1985)	
	Jiang et al., "Cardiovascular Protective Effects of Synthetic Isoflavone Derivatives in Apolipoprotein-E-Deficient Mice," <i>J. Vascular Res.</i> 40:276-284 (2003)	
	Jung et al., "Naringin Supplementation Lowers Plasma Lipids and Enhances Erythrocyte Antioxidant Enzyme Activities in Hypercholesterolemic Subjects," <i>Clin. Nutr.</i> 22:561-568 (2003)	
	Kudzma et al., "Effects of Estrogen Administration on the Lipoproteins and Apoproteins of the Chicken," <i>Biochim. Biophys. Acta.</i> 572:257-268 (1979)	
	Lamon-Fava, "Genistein Activates Apolipoprotein A-I Gene Expression in the Human Hepatoma Cell Line Hep G2," <i>J. Nutr.</i> 130:2489-2492 (2000)	
	Law et al., "Aortic Endothelial Cells Damaged by a Nitric Oxide Donor and Protected by Flavonoids," <i>Life Sci.</i> 64:199-204 (1999)	
	Lin et al., "Estrogen Regulation of Yolk and Non-Yolk Protein Synthesis in the Avian Liver. An Immunocytochemical Study," <i>Differentiation</i> 18:105-114 (1981)	
	Lin et al., "Effects of Estrogen on Specific Protein Synthesis in the Cockerel Liver: an Immunocytochemical Study on Major Apoproteins in Very Low Density and High Density Lipoproteins and Albumin," <i>Endocrinology</i> 107:70-75 (1980)	
	Luo et al., "Influences of 3,4,5-trihydroxystilbene-3-B-mono-D-glucoside on Beat Rate and Injury of Cultured Newborn Rat Myocardial Cells," <i>Acta Pharmacologica Sinica</i> 11:147-150 (1990)	
	Matsuura et al., "Positional Reactivity of Acylpolymethylbenzenes in Electrophilic Substitution," <i>Bull. Chem. Soc. Jpn.</i> 67:757-765 (1994)	
	Neuhaus et al., "Inhibition of the Vascular-Endothelial Growth Factor-Induced Intracellular Signaling and Mitogenesis of Human Endothelial Cells by Epigallocatechin-3 Gallate," <i>Eur. J. Pharmacol.</i> 483:223-227 (2004)	
	Nikander et al., "Effects of Isolated Isoflavonoids on Lipids, Lipoproteins, Insulin Sensitivity, and Ghrelin in Postmenopausal Women," <i>J. Clin. Endocrinol. Metab.</i> 89:3567-3572 (2004)	
	Pace-Asciak et al., "The Red Wine Phenolics trans-Resveratrol and Quercetin Block Human Platelet Aggregation and Eicosanoid Synthesis: Implications for Protection Against Coronary Heart Disease," <i>Clinica Chimica Acta</i> 235:207-219 (1995)	
	Quinoñes et al., "The <i>egr-1</i> Gene Is Induced By DNA-Damaging Agents and Non-Genotoxic Drugs in Both Normal and Neoplastic Human Cells," <i>Life Sci.</i> 72:2975-2992 (2003)	
	Ragione et al., "Antioxidants Induce Different Phenotypes by a Distinct Modulation of Signal Transduction," <i>FEBS Lett.</i> 532:289-294 (2002)	
	Ragione et al., "p21Cip1 Gene Expression is Modulated by Egr1: A Novel Regulatory Mechanism Involved in the Resveratrol Antiproliferative Effect," <i>J. Biol. Chem.</i> 278:23360-23368 (2003)	
	Rampa et al., "Fluorenone and Benzophenone 1,4-Dihydropyridine Derivatives With Cardiodepressant Activity," <i>Arzneim.-Forsch./Drug Res.</i> 42:1284-1287 (1992)	
	Saadeddin et al., "Pharmacokinetics of the Time-Dependent Elimination of All-Trans-Retinoic Acid in Rats," <i>AAAPS PharmSci</i> 6:1-9 (2004)	
	Sanders et al. "Moderate Intakes of Intact Soy Protein Rich in Isoflavones Compared With Ethanol-Extracted Soy Protein Increase HDL But Do Not Influence Transforming Growth Factor β (1) Concentrations and Hemostatic Risk Factors For Coronary Heart	

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NON PATENT LITERATURE DOCUMENTS			
		Disease in Healthy Subjects" <i>Am. J. Clin. Nutr.</i> 76:373-377 (2002)	
		Suzuki et al., "Anomalous Products Obtained by Nitration of Pentamethylbenzene, Pentaethylbenzene, and Some Mixed Penta-alkylbenzenes," <i>Bull. Chem. Soc. Jpn.</i> 43:473-480 (1970)	
		Suzuki et al., "An Interpretation of the Puzzling Dichotomy of the Reaction Modes Observed During the Side-chain Nitration of Alkylaromatics with HNO ₃ /CH ₂ Cl ₂ and HNO ₃ /(CH ₃ CO) ₂ O," <i>Chem. Lett.</i> 5:891-894 (1987)	
		Suzuki et al., "Synthesis of 7,8-Dihydroxy-5-hydroxymethyl-2-phenyl-chroman-4-one; the Aglycon of Actinoflavoside," <i>SYNLETT</i> 1:0116-0118 (2004)	
		Taylor et al., "Beneficial Effects of a Novel Thyromimetic on Lipoprotein Metabolism," <i>Molecular Pharmacology</i> 52:542-547 (1997)	
		Taylor et al., "Glucocorticoid Increases Rat Apolipoprotein A-1 Promoter Activity," <i>J. Lipid Res.</i> 37:2232-2243 (1996)	
		Theriault et al., "Modulation of Hepatic Lipoprotein Synthesis and Secretion By Taxifolin, a Plant Flavonoid," <i>J. Lipid Res.</i> 41:1969-1979 (2000)	
		Usui et al., "Estrogen Treatment of Prostate Cancer Increases Triglycerides in Lipoproteins as Demonstrated by HPLC and Immunoseparation Techniques," <i>Clin. Chim. Acta</i> 317:133-143 (2002)	
		Wallace et al., "Novel Nonsteroidal Anti-Inflammatory Drug Derivatives With Markedly Reduced Ulcerogenic Properties in the Rat," <i>Gastroenterology</i> 107:173-179 (1994)	
		Walle et al., "High Absorption But Very Low Bioavailability of Oral Resveratrol in Humans," <i>Drug Metabolism and Disposition</i> 32:1377-1382 (2004)	
		Wang et al., "Reducing Effect of 3,4',5-trihydroxystilbene-3-B-mono-D-glycoside on Arterial Thrombosis Induced by Vascular Endothelial Injury," <i>Acta Pharmacologica Sinica</i> 16(3):159-162 (1995)	
		Zhang et al., "Influence of 3,4',5-trihydroxystilbene-3-B-mono-D-glycoside on Vascular Endothelial Epoprostenol and Platelet Aggregation," <i>Acta Pharmacologica Sinica</i> 16:265-268 (1995)	
		Chemical Abstract DN 170:287654; also cited as CN 1386742.	
		Chemical Abstract DN 126:220717; also cited as FR 2735366.	
		Chemical Abstract DN 126:301793; also cited as FR 2737662.	
		Office Action dated June 7, 2005, in co-pending Application No. 10/222,013, Attorney Docket No. 09741.0002-00000, Title: The Use of Resveratrol to Regulate Expression of Apolipoprotein AI, Filed: August 15, 2002.	
		Office Action dated November 15, 2005, in co-pending Application No. 10/222,013, Attorney Docket No. 09741.0002-00000, Title: The Use of Resveratrol to Regulate Expression of Apolipoprotein AI, Filed: August 15, 2002.	
		International Search Report for PCT Publication No. WO 2004/016255, which claims priority to co-pending Application No. 10/222,013, Attorney Docket No.: 09741.0002-00000, Title: The Use of Resveratrol to Regulate Expression of Apolipoprotein AI, Filed: August 15, 2002.	
		International Search Report for International Application No. PCT/CA2004/001805 priority application for co-pending U.S. Application No. 10/762,796, Attorney Docket No.: 09741.0006-00304, Title: Nitric Oxide Donating Derivatives for the Treatment of Cardiovascular Disorders, Filed: October 7, 2004.	
		International Search Report for International Application No. PCT/CA2004/001818 priority application for co-pending U.S. Application No. 10/807,800, Attorney Docket	

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NON PATENT LITERATURE DOCUMENTS			
		No.: 09741.0007-00304, Title: Treatment of Diseases Associated with the EGR-1 Enhancer Element, Filed: October 8, 2004.	

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.